AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1-4. (Canceled)

5. (Previously Presented) A nuclear magnetic resonance method of detecting and monitoring the flocculation kinetics of non-slid high molecular weight aggregates of a complex fluid comprising:

applying to the fluid a first static polarization magnetic field, then at least a second oscillating pulsed magnetic field perpendicular to the first magnetic field, created by coils connected to an excitation generator for nuclear magnetic resonance of nuclei being considered and acquisition of relaxation signals of the nuclei in the fluid;

detecting, for the relaxation signals, a first part representative of relaxation of the aggregates in the fluid and a second part representative of relaxation of a liquid fraction of the fluid; and

determining a flocculation rate of the fraction by comparison of values $M_x(t = 0)$ and $M_{x1}(t = 0)$ extrapolated at a start of acquisition times of the first part and of the second part respectively.

6. (Previously Presented) A method as claimed in claim 5, wherein: the flocculation rate is determined by the relation:

$$Tf = (M_x(t = 0) - M_{x1}(t = 0))/M_x(t = 0).$$

7. (Previously Presented) A method as claimed in claim 5, wherein:

a flocculation threshold of the fluid is obtained by modelling the relaxation signals actually obtained by means of a combination of expo nential functions depending on an adjustment parameter and a threshold corresponding to a maximum value of the adjustment parameter.

8. (Previously Presented) A method as claimed in claim 6, wherein:

a flocculation threshold of the fluid is obtained by modeling the relaxation signals actually obtained by means of a combination of exponential functions depending on an adjustment parameter and a threshold corresponding to a maximum value of the adjustment parameter.

9. (Previously Presented) A method as claimed in claim 5, comprising:

applying to the fluid a sequence of two 90° pulses in which a 180° magnetization focussing pulse is inserted, between two successive applications of the 90° pulses, with time intervals $\tau/2$ between the application of the 90° pulses, and measuring a maximum amplitude of the relaxation signals in a vicinity of time $t=2\tau$ for different values of τ in the sequence of two 90° pulses.

10. (Previously Presented) A method as claimed in claim 6, comprising:

applying to the fluid a sequence of two 90° pulses in which a 180° magnetization focussing pulse is inserted, between two successive applications of the 90° pulses, with time intervals $\tau/2$ between the application of the 90° pulses, and measuring a maximum amplitude of the relaxation signals in a vicinity of time $t=2\tau$ for different values of τ in the sequence of two 90° pulses.

11. (Previously Presented) A method as claimed in claim 7, comprising:

applying to the fluid a sequence of two 90° pulses in which a 180° magnetization focussing pulse is inserted, between two successive applications of the 90° pulses, with time intervals τ/2 between the application of the 90° pulses, and measuring a maximum amplitude of the relaxation signals in a vicinity of time t=2τ for different values of τ in the sequence of two 90° pulses.

12. (Currently Amended) A method as claimed in ~~claim 7~~claim 8, comprising:

applying to the fluid a sequence of two 90° pulses in which a 180° magnetization focussing pulse is inserted, between two successive applications of the 90° pulses, with time intervals τ/2 between the application of the 90° pulses, and measuring a maximum amplitude of the relaxation signals in a vicinity of time t=2τ for different values of τ in the sequence of two 90° pulses.